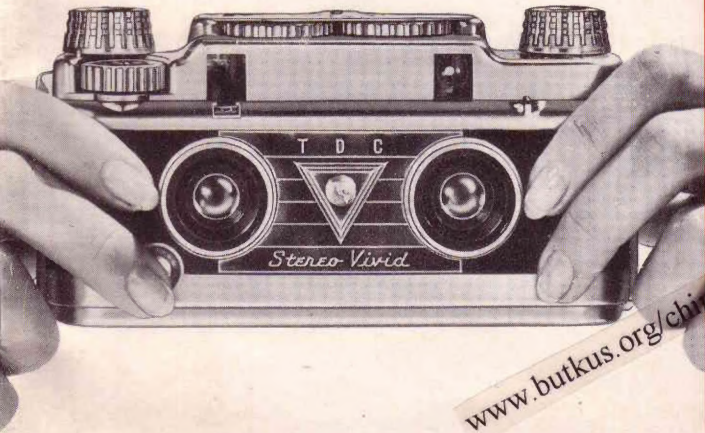


HOW TO USE YOUR



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C

STEREO
VIVID
CAMERA

www.butkus.org/chinon

INDEX

Introduction	2
Controls, top and front	4
Controls, back	5
Loading	6-8
Setting exposure counter	8
Rewinding	9
Taking the picture (quick method)	10
Taking the picture (precision method)	11-17
Stopping action	14-15
Sharpness control	16-18
Flash	19-21
Filters	20
Picture planning	22
Multiple exposures	24
Accessories	25-26
Warranty	27

TAKING PICTURES

The pictures you take come to life when you use your TDC Stereo Vivid Camera. We have two eyes. We are accustomed to a two-eyed view of things. The precisely matched lenses of the Stereo Vivid capture that view on modern color film. Its pictures don't just look like accurate images of the original scene; they look like the real thing!

All the realism of modern three-dimensional photography is yours automatically with the Stereo Vivid. Its natural depth effect is built in. You don't even have to

THAT LIVE

think about it as you shoot. The fact is, you don't have to think about any of the complications that frequently confuse photographers with ordinary cameras. Things like *f/* numbers are there if you want them, but you can shoot forever without giving them a thought. The Stereo Vivid exposure indicator dial takes the work out of adjusting lenses and shutters. You just set it according to light conditions and shoot.

Like all branches of photography, stereo reserves a few special rewards for the fan

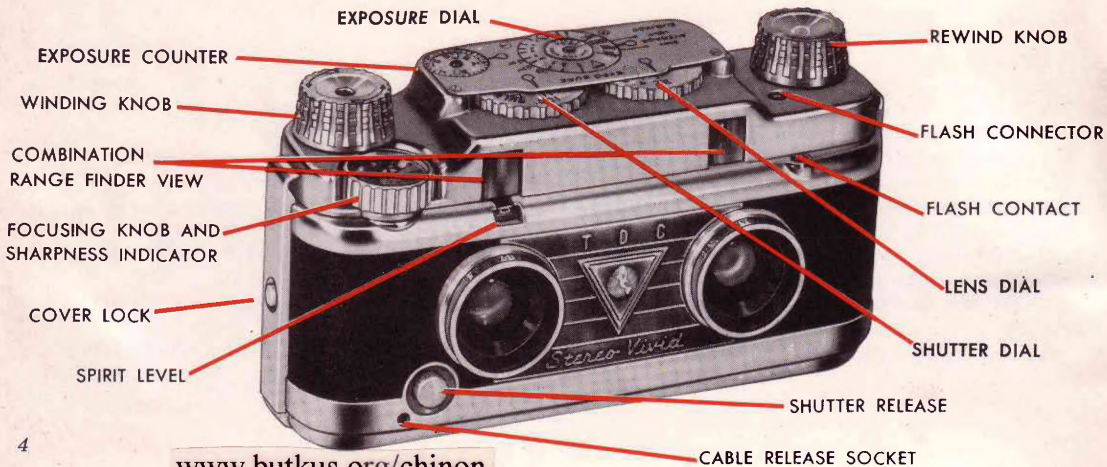
who enjoys studying a scene before he clicks the shutter. For him the Stereo Vivid provides precision controls like its built-in spirit level and automatic sharpness indicator. Whether you elect to snap pictures as you go, or make a careful study of each one, the Stereo Vivid way is the best way for you. You will enjoy reading about it in the pages that follow.

Good luck, and good shooting!

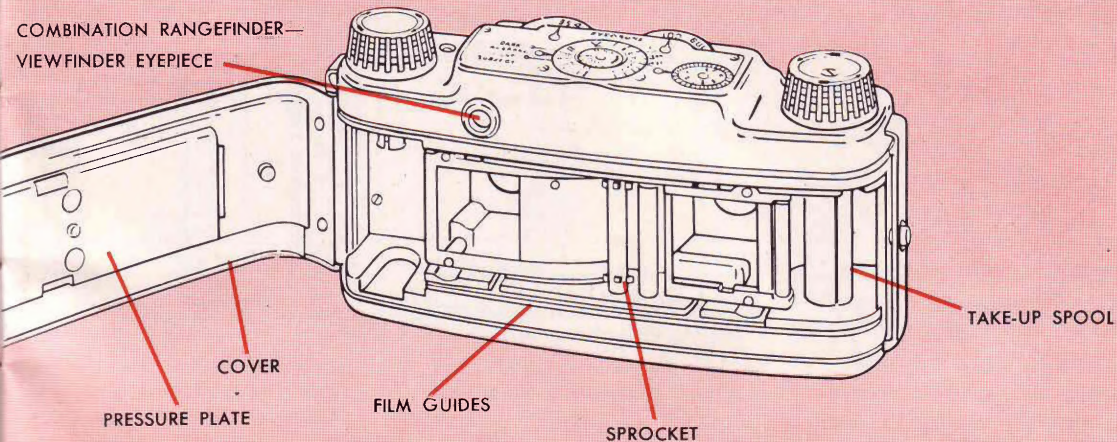
THREE DIMENSION COMPANY

division of Bell & Howell

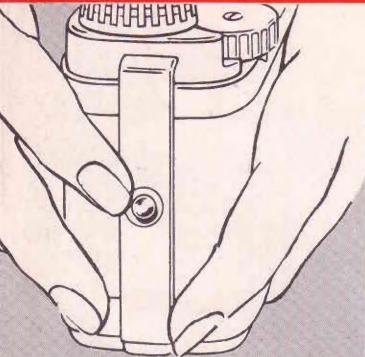
GET ACQUAINTED WITH YOUR



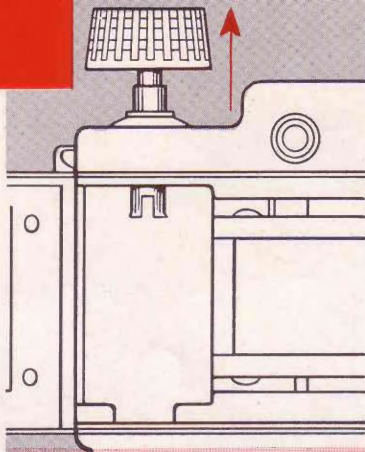
TDC STEREO VIVID CAMERA



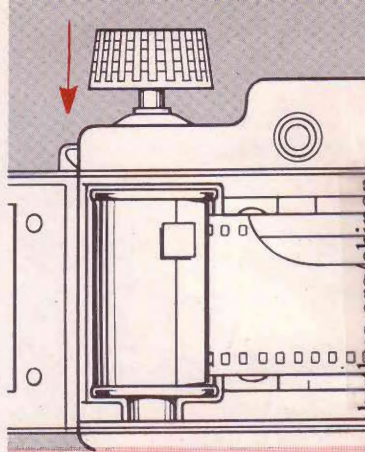
LOADING



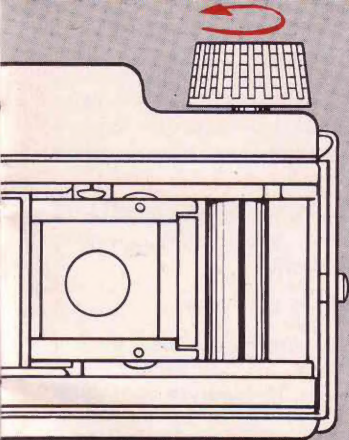
1. PRESS cover release button and swing camera back open on its hinges.



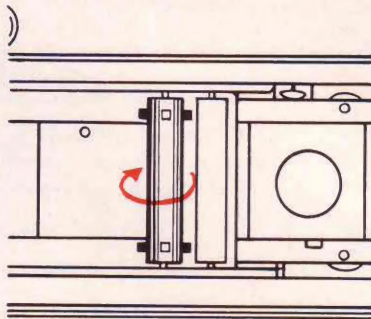
2. LIFT rewind knob as far as it will go, pulling shaft up with it.



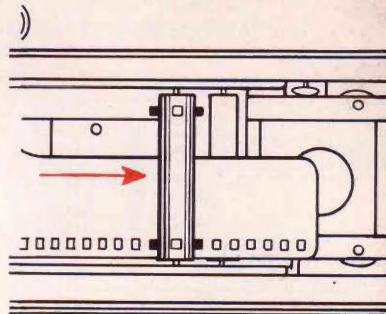
3. INSERT cartridge with leader toward center of camera. Push knob down.



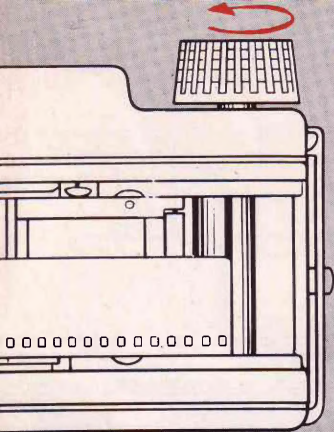
4. TURN winding knob to left until shutter is set and slot faces up.



5. ROTATE sprocket to left until it comes to firm stop. Press shutter release.



6. INSERT leader beneath sprocket, holes aligned with teeth; push leader through.

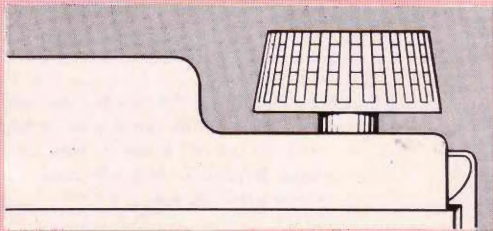


7. INSERT film end in slot of take-up spool, crease and begin winding.

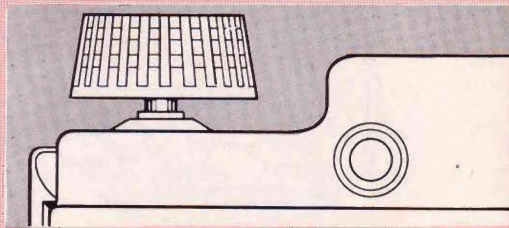
8. CLOSE camera back and turn winding knob until it stops. In advancing film after each exposure, continue winding until a positive stop is encountered. Do NOT stop winding when you hear a "click." This merely indicates that the shutter has been cocked. Complete winding to a positive stop is necessary after each exposure to assure correct spacing of the stereo pairs on the film.
9. TRIP shutter and wind to advance film again. Check to make sure exposure counter dial rotates as film is wound, indicating film is advancing properly.
10. TRIP SHUTTER and wind the film a third time.
11. SET COUNTER to number of exposures provided by film load used—20 for stereo loads, 16 for ordinary 20-exposure rolls, and 29 for regular 36-exposure cartridges. Counter always shows number of exposures remaining. When it reaches 1, last picture is in taking position. CAUTION: Do not force winding knob in an attempt to get an extra exposure. Film may pull loose from spool, making it necessary to remove the film from camera in darkroom to save it.

REWINDING FILM

Modern 35-mm color film comes in daylight-loading cartridges. As each exposure is made the film is transferred from the cartridge to a take-up spool which the winding knob turns. To remove the film it must be wound back into the cartridge *before* the camera is opened.



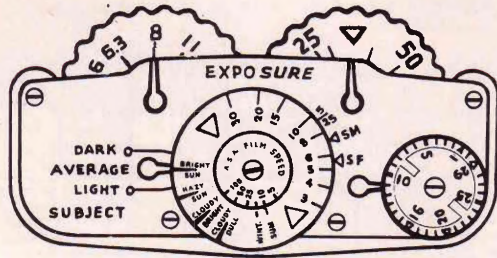
1. LIFT the winding knob as far as it will go—about $\frac{1}{8}$ inch. This disengages the film advance and shutter cocking mechanism. Knob must turn freely before rewinding.



2. PULL UP rewind knob about $\frac{1}{4}$ inch above camera. Turn in direction of arrows, watching counter dial. When dial no longer rotates turn knob 3 or 4 more times, then open camera.

TAKING THE PICTURE

*(quick method for the photographer
who must shoot on the run)*



1. BRIGHT DAYS are best for picture-taking and you can use a simplified system for shooting sunny scenes. Set the lens dial at 8. Then move the shutter dial until you align the light condition on the Exposure dial with the average subject arrow. Bright sun gives setting below.



2. FOCUS by turning the focusing knob to align the red line at 12 feet with the red dot below it. Now anything beyond 6 feet will come out sharp in the picture.

3. SHOOT by squeezing the shutter release button while viewing the scene through finder window. In using this system ignore yellow focusing field seen in eyepiece.

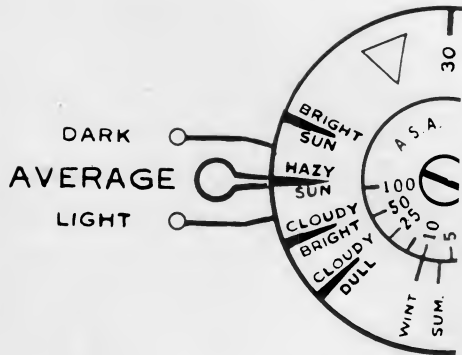
Here's the quick easy way to do it . . .

1. Decide which is more important to the picture you are taking, shutter speed or depth of focus. If you want to stop action, a fast shutter speed is necessary. If you want depth of focus, it is necessary to use a small lens opening (large f/number).

2. If shutter speed is important, move the shutter speed dial to the desired speed setting. If depth of focus is the important thing, set the lens-opening dial to the desired f/number.

3. Now, by turning either of these dials,

with the other one set in a given position, you rotate the *Exposure* dial. This is how you set it for the existing sky condition (see the four major sky conditions on dial) and subject (light, dark or average). Keep turning either the shutter speed dial, or the lens-opening dial, until the *Exposure* dial moves to a position where sky condition and subject are lined up. This procedure sets lens opening and shutter speed automatically. All you do now is focus and take your picture. Practice this procedure a few times and you'll have it.



DARK subjects include people in dark clothing or in shade, dark foliage, flowers, buildings or rock formations.

MOST subject matter falls in the average class. Use this setting for scenes that include both light and dark subjects in about equal proportions and when in doubt.

LIGHT scenes show wide expanses of snow, sand or water. Use for high mountain scenes where air is clear.

STOPPING ACTION

Things that move when you click the shutter may appear blurred in the picture. You can get them sharp, though, if you use a fast enough shutter speed. Here are some of the settings your camera provides and examples of typical situations for using them.

When a given speed is needed to avoid blur due to movement, set the shutter dial of your Stereo Vivid at that speed. Then use the lens dial to align subject with light condition. When you do, it will automatically select the lens opening required for proper exposure.



BULB—Used for time exposures. Requires tripod and cable release. Scenes must be perfectly still. Beware waves and wind-blown foliage. Don't show people moving near camera.



1/10—Longest automatically-timed exposure the Stereo Vivid provides. For best results use tripod and cable release. Scenes must appear still. Avoid people or animals close to camera.



1/35—Slowest shutter speed recommended for pictures with camera hand-held (unless light conditions or sharpness control require slower speed and tripod is

unavailable). Marked by red triangle on shutter dial. Suitable for posed pictures and slow movement some distance from camera.



1/50—Captures slightly more movement than 1/35. Useful for stopping slow movement at a distance from camera.



1/100—Fastest speed on the Stereo Vivid scale. Catches moderately fast action near the camera, fast action at a distance. Suitable for children playing, moving traffic and pedestrians on street, baseball and football from stands. This is the fastest speed generally advisable for good results in stereo photography.

CAMERA JITTERS cause more photo failures than anything else. Don't jar the camera as you trip the shutter. The Stereo Vivid release is built to make smooth shooting possible even at the slower speeds. Hold your breath for an instant and squeeze it like a gun trigger.

TIMING and angle are more important than a fast shutter in shooting stereo action. There are few occasions when you can use top speeds. Realism depends on great depth of sharpness—which calls for small lens openings. Modern color film needs considerable exposure—which requires slower shutter speeds when the lens openings are small. You can avoid blur at slower speeds if you shoot movement to or from the camera, not right across in front of it. Watch for moments when action pauses, as at the peak of a dive, and time your shots to capture them.

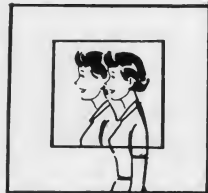
SHARPNESS CONTROL

The coated 35-mm f/3.5 Tridar lenses of your Stereo Vivid camera are so good you don't have to think about focusing if you don't want to. On sunny days you can set the lens dial at f/6.3 and the focusing knob at 12 feet and be all set for average scenes. But if you are interested in technique and like to get every picture critically sharp, you will enjoy working with the Stereo Vivid sharpness indicator. It is interlocked with the Tridar lenses to show the depth of sharpness all the time.

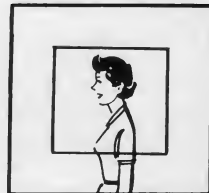
The beauty of the sharpness indicator is that you don't have to think about hyperfocal distances or depth of field tables to use

it. Its two red arms show the near and far limits of sharpness at every lens setting, changing automatically as you move the lens dial. By turning the focusing knob above them you can place that zone of sharpness anywhere you wish within camera range. You can enlarge it or compress it by changing lens settings—and see just what is happening while you do it.

For accurate focusing you have the Stereo Vivid precision rangefinder which is automatically coupled with the focusing knob.



OUT OF FOCUS



IN FOCUS

When you look into the combination range-finder-viewfinder eyepiece, you can see the whole field of view that the camera takes in. You use it to "frame" the picture you want to take. Within this field is a smaller area that appears yellow. It is the part that is used for focusing. At first you will see a double image of your subject in this yellow area. Rotate the focusing knob while looking into the finder. The yellow image will move sideways as you turn the focusing knob. Shift it until the two images of your subject overlap exactly so they look like one. When you do this, the camera is automatically focused on the subject. What about the background behind the subject? You can check it in an instant. The sharpness indicator shows the range before and behind the subject that will also appear in focus. The three examples on these pages show how to make it work for you.



1. SUPPOSE you want depth of focus from 10 feet to infinity. Lens at $f/4$; sharpness indicator shows insufficient depth. As you change lens setting, dial shows desired depth of focus at $f/5.6$.





2. THE RELIABLE 12-foot setting shows depth from 6 feet to infinity, but scene contains nothing nearer than 10 feet. Indicator shows you can use the middle and best part of the sharpness range by shifting focus to 20 feet.



3. YOU focus on subject at 10 feet; distant objects will be in picture but indicator shows they will not be sharp. So, turn focusing knob to left to get depth of focus from 10 feet to infinity.



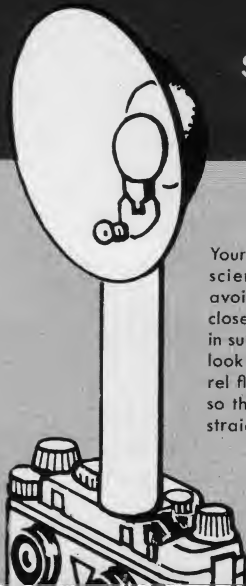
THE STEREO VIVID flash unit mounts rigidly on the camera. Tighten the mounting screw after seating its bracket on the camera contact.

You can get good stereo pictures anywhere at any time by using flash with your Stereo Vivid Camera. Its built-in contacts assure accurate synchronization. The Stereo Vivid Exposure dial shows how to set the camera for the most popular flashbulbs.

For outdoor color stereo shots on bright sunny days, you can use flash to eliminate troublesome dark shadows. The use of flash as a supplementary light source is quite popular, particularly in taking outdoor portraits or in any situation where even illumination of the subject is desired.

STEREO FLASH

Your Stereo Vivid flash unit is scientifically positioned to avoid "pink eye" (flash too close to camera level reflects in subject's eyes, making them look pink). The new long-barrel flash unit raises flash level so that light is above and not straight-on into subject's eyes.





SM-SF—These gas-filled lamps are the choice of many photographers because they provide a very short flash that gives the equivalent of 1/200 second exposure due to its brief duration. Their light has a color approximating that of Photoflood illumination. They require no filters when used with Kodachrome film, Type A. Photographers

FILTERS—TDC Stereo Vivid filters are available in Type A (for shooting indoor Type A Kodachrome outdoors); Skylight 1A (for cutting through atmospheric haze in landscape and aerial scenes)—no change in exposure required for either; and 81-C Flash (used when exposing Type A Kodachrome with M-class flashbulbs, not required with SM-SF bulbs.) Scientifically checked for exact light transmission, thermo-sealed, these filters are permanently mounted in shockproof screw-in rings for maximum protection.

who take a lot of indoor pictures prefer to load with Type A film and use Daylight filters on the camera for occasional outdoor shots.

1. Set the shutter speed dial at the red triangle indicating 1/35 second. See that the ASA film speed setting on the exposure indicator is at "Summer" and "10". The *daylight* ASA film speed rating is used in this system.
2. Compose the picture and focus. Read the footage to the subject as indicated on the focusing knob.
3. Turn the lens dial to align the appropriate footage (in red) on the exposure indicator with the "SM" or "SF" pointer.
4. Sight and shoot.



5-25—The No. 5B and No. 25B blue flashbulbs are used by photographers who like to use Daylight Type film all the time and who want the extra light these bulbs provide in comparison with the SM and SF lamps. The clear No. 5 and No. 25 lamps also can be used with Daylight Type film if they are colored by immersing them in Jendip blue solution or if a blue flash shield is placed over the flash reflector. Exposures are the same with any of these methods. Here is the procedure for setting the camera:

1. Set the shutter speed dial at $1/25$ second. See that the ASA film speed setting on the exposure indicator is at "Summer" and "10".

2. Compose the picture and focus. Read the footage to the subject as indicated on the focusing knob.

3. Turn the lens dial to align the appropriate footage (in red) on the exposure indicator with the $5/25$ line.

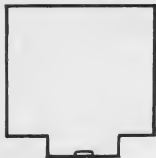
4. Sight and shoot.

ELECTRONIC FLASH—The light output of the many speedlight units now on the market varies so greatly that it was not practical to provide automatic settings for them on the exposure indicator. Set the shutter at $1/100$ second and the flash unit for "X" or zero time delay. Use the exposure instructions provided by the manufacturer of the unit.

PICTURE PLANNING

Shooting stereo differs little from ordinary picture-taking except that it is easier to get breath-taking results. Here are the few points peculiar to stereo that you will want to watch:

LEVEL the camera for every shot. The spirit level in the finder will help when the picture doesn't contain vertical lines or other aids. Center its bubble in the bottom of the view.



22

DO THIS . . .

FOR THIS . . .

NOT THIS



DO THIS . . .



NOT THIS

FOCUS sharply; the beautiful realism of stereo is more convincing when pictures are razor-sharp. Hold camera steady so movement doesn't spoil the sharpness you have planned.

FOR PROJECTION on a big screen, limit the depth of scenes that contain subjects close to the camera. Most pictures are suitable for projection when properly mounted. To make sure, plan your pictures to fall within the ranges covered by projection mounts:

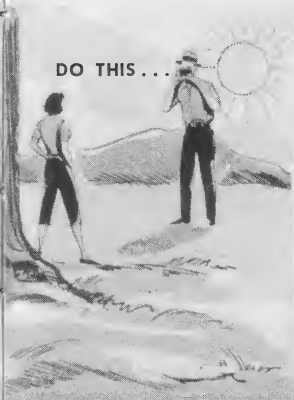
Normal—7 feet to infinity

Medium—4 to 18 feet

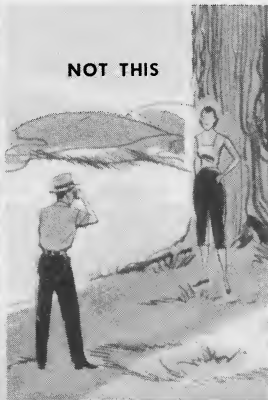
Close-up—2½ to 6 feet

USE flat lighting from the front for most effective stereo shots. Bright sunlight is best. Avoid backlit subjects, deep shadows, and large shadow areas.

DO THIS . . .



NOT THIS



FOREGROUND material enhances depth effect. Have a person or object somewhere within 7 to 20-foot range in every picture, even if main subject is a distant scene.

MULTIPLE EXPOSURES

The Stereo Vivid is designed to prevent accidental double exposures, and you'll never in this world take more than one picture on the same film unless you deliberately set out to do it. For some types of trick shots, and for wide or narrow interocular pictures made by shifting the camera between left and right lens views, some photographers want to be able to cock the shutter without advancing the film. Here is how to do it:

1. Make the first exposure as usual, but don't turn the winding knob to cock the shutter and advance the film in the normal way.

2. Lift the winding knob to its rewind position and hold it. If you let it go, the film on the take-up spool will loosen and may become disengaged from its slot.

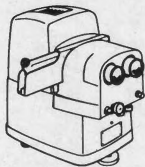
3. Lift the rewind knob to its rewind position and begin to turn it in the direction of the arrows. Watch the exposure counter dial on the top of the camera, and note the number at which it is set.

4. Keep turning the take-up knob until the counter dial begins to turn and you feel the winding knob move in your other hand. Keep tension on the winding knob and turn the take-up knob until the counter dial has moved about three-fourths of a turn. Then push down both rewind and take-up knobs.

5. Turn take-up knob until it stops. Exposure counter will return to previous setting and shutter will be cocked at the same time.

6. Make second exposure by tripping shutter in usual way. Any number of exposures can be made by repeating this procedure.

PRECISION MATCHED ACCESSORIES FOR YOUR TDC STEREO VIVID CAMERA



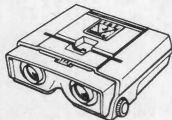
TDC Stereo Vivid Projector

Takes Stereo Vivid and all 35mm stereo slides, and standard 2x2 slides. Matched, coated f/3.5 anastigmat lenses, twin 500-watt light systems. Requires polarizing glasses. **\$149.50**

Stereo Vivid Deluxe

with 750-W lamps, 3 slide changers. **\$179.50**

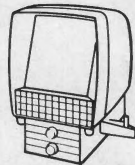
Cases for above **\$20.00**



TDC Stereo Vivid Viewer \$17.50

A handy, compact viewer with superb brilliance. Takes all standard 1 $\frac{5}{8}$ x4 stereo slides. Dual focusing knobs, smooth interocular control, precision achromatic lenses with larger apertures for bigger picture.

Also available — Tray-loading Stereo Selectron Changer for either projector **\$19.50**



TDC Stereo Project-or-View

Both viewer and projector. Big 45 $\frac{1}{2}$ sq. in. black glass screen. Matching 3" f/2.8 coated anastigmat lenses, condensers, polarizers. Twin 300-watt lamps. Takes all standard stereo slides and 2x2 slides (non-stereo). AC only. **\$144.50**

TDC Stereo Table Viewer \$119.50

Cases for above **\$20.00**

THE TDC STEREO VIVID . . .

A great new instrument from the TDC division of Bell & Howell. Like all products of this company, the Stereo Vivid is backed by a most honored reputation in the fields of photographic and audio engineering. Bell & Howell has been presented with an honorary award by the Academy of Motion Picture Arts and Sciences for its pioneering contributions .

WARRANTY

1. This new TDC Stereo Vivid Camera is warranted for a one-year period from the date of purchase thereof to be free from defects in materials and workmanship. Any servicing necessary because of imperfections in materials or workmanship during such one-year period will be performed without charge (except for transportation of camera) by Three Dimension Company division of Bell & Howell.

2. A camera which has been damaged or abused or which has become worn from extended use will be repaired at factory-established rates.

3. No liability is assumed for expenses or damages resulting from interruptions in operation of the camera.

4. The Company will not be liable for damage to camera during transit when said camera is being returned for service under this warranty

5. This guarantee is void: (a) if camera has been serviced by other than TDC; (b) if camera has not been registered with TDC within 10 days from date of purchase thereof (use card attached).

6. This warranty is made in lieu of any other warranty, guarantee or liability, expressed or implied. It is valid only as to the initial purchaser of this new camera and his donees.

THREE DIMENSION COMPANY
division of Bell & Howell